

Co-Creating and Co-Teaching a General Education Course in Information Literacy for Engineering Undergraduate Students

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Abstract

After winning an interdisciplinary grant in 2023 from their university, the authors, one an engineering librarian, and the second, an engineering faculty member specializing in technical communication, launched an undergraduate general education course in information literacy on digital platforms. Their for-credit class focused on information literacy principles such as the ACRL Framework for Information Literacy and evaluation methods like the CRAAP test, as well as the application of such principles in analyzing misinformation on social media. As their students were engineering majors, they also integrated ethical engineering design principles into the course to examine engineers' responsibilities to address the social impacts of their work, such as the spread of misinformation online. Through writing and research assignments and individual and group work, these professors aimed to situate information literacy instruction within the undergraduate engineering curriculum as an integral part of teaching ethics, research, and writing. After teaching this course for two semesters, the professors now share its themes, objectives, learning outcomes, and assignments to support others in developing introductory information literacy courses, navigating university approval processes, collaborating on course design and instruction, and addressing common challenges.

Introduction

This paper details a years-long partnership between an engineering librarian and an engineering writing professor, which culminated in their co-teaching of a for-credit information literacy course during the Spring 2025, Fall 2025, and Spring 2026 semesters. By starting with the history of this endeavor, the co-authors provide readers with context into how this course came to be. Thus, a brief overview of information literacy instruction in both this university's library system and their School of Engineering follows.

The libraries are organized via subject liaisons who are charged with teaching information literacy to their communities in addition to providing reference and research services and outreach. Librarians have faculty status and pursue teaching opportunities as part of their promotion process. Teaching by librarians typically entailed one-shot instruction, where librarians visited classes and taught students how to find and use library resources for one class session. However, with high turnover in staffing in the libraries, this method proved to be unsustainable. This, coupled with the critiques of the one-shot instruction method, compelled the engineering librarians to do something different [1-3]. They created in-person and online workshops and developed more asynchronous learning objects in order to manage the demand across STEM liaison communities.

Simultaneously in the School of Engineering, the undergraduate engineering writing program underwent an organizational change, which resulted in the creation of the Engineering in Society Program (EIS) in 2022. This reorganization expanded the writing program's emphasis on engineering ethics to include more courses and activities related to the examination of the impacts of engineering on society. As part of this expansion effort, the faculty co-author began teaching a Wikipedia assignment, which revealed that her students struggled with foundational skills in library research such as distinguishing between popular and scholarly sources, utilizing the library to access academic information, and thinking critically about different use cases for various types of information. As a result she increasingly relied upon the librarian co-author for support, advice, and resources to address these gaps.

Over several years, these co-authors fostered a community of practice with one another, sharing readings on topics like academic libraries, teaching and learning, and information literacy. They continued to collaborate and co-host Wikipedia edit-a-thons at the library and began to discuss the possibility of a formal course on information literacy. Because there was no administrative mechanism within the libraries to offer an undergraduate course, the co-authors decided to explore the idea of offering a course through the EIS program with its new focus on engineering ethics and the societal implications of technologies. Thus, they created a course that centered information literacy within the specific context of online misinformation and engineers' ethical duties to address problems like misinformation. Once an initial course plan and syllabus for such a course was developed, they applied for an interdisciplinary teaching grant from the university in late 2022. (This grant program has since been discontinued due to the university's financial issues [4].)

After being awarded the grant during the Spring 2023 semester, the co-authors further developed the course curriculum and submitted it to the university's general education committee for approval in the middle of the Spring 2023 semester [5]. The co-authors then added more readings and resubmitted the syllabus upon receiving comments from this committee regarding increasing reading requirements. As the committee review cycle had ended before the committee could review the revised syllabus with expanded reading, however, the proposal languished for several months until the start of the next review cycle in 2024. At that time, the revised course was approved as a general education course that fulfilled the "social analysis" general education requirement for students who were engineering majors.

Once the co-authors received this general education designation, they submitted the course to the curriculum committee at the engineering school for approval at the start of the Fall 2024 semester. Near the end of the Fall 2024 semester, the committee provided feedback requesting more engineering ethics content, and so the course was revised again to expand the ethics component with more readings and a more explicit integration of ethics in the course's major assignments. Once this was done, the course was approved by the engineering school to be

offered for the first time in the Spring 2025 semester as EIS 103: Information Literacy: Navigating Digital Misinformation. Due to space constraints on campus, the course was (and continues to be) offered in a classroom that holds 24 students located within the Science and Engineering Library. The form of the course syllabus can be found in Appendix 1.

Course Design

In the approximately two-year period from the awarding of the grant to final committee approval, the co-authors worked to establish the foundations of the course. The course description in the syllabus states,

“The rise of social media and other digital technologies in the past two decades has been accompanied by an unprecedented increase in the proliferation and dissemination of misinformation and disinformation. The implications of the spread of false information extend far beyond the digital space to include significant social, political, and economic upheavals throughout the world. For today's students, these technologically complex digital landscapes are their primary sources of information, making digital and informational literacy a critical and necessary life skill. This course on information literacy on digital platforms will familiarize students with the technological designs and operations of digital tools that shape the content they see in their daily lives. It also aims to bolster their critical thinking, information literacy, and library research skills so that students can identify and analyze false information and recognize when reliable information is needed and where reliable information can be found. These skills are directly transferable to students' academic, professional, and personal online lives.” [6]

The authors organized a shared Google Drive of weekly readings, the lecture slides, assignments, and major projects. The co-authors then transferred the course content on the university's LMS, Brightspace.

Foundational to their course materials were the course learning objectives that reflected principles of information literacy, engineering professional ethics, and university general education priorities. Our learning objectives not only integrated the ACRL Framework and the Companion Document to the Framework for Information Literacy for Higher Education (collectively, the "ACRL Framework"), but also included objectives demonstrating understanding of ethical principles for engineering majors and those of general education courses that fulfilled the university's social analysis category [7]. Specific examples included understanding that scholarship is a conversation and critical to building scientific consensus from the ACRL Framework, analyzing the ethical implications of engineering design designs on digital platforms, and explaining the social implications of the dissemination of misinformation.

From the course's creation and through each administration of it, the co-authors strived to update the readings to reflect the latest developments in information literacy and online misinformation. Their efforts were necessitated by heightened instances of misinformation created by new generative AI tools. Weekly readings consisted of both popular and scholarly articles to help

diversify the readings. Popular readings came from a variety of sources like *The New York Times* and *Wall Street Journal* and reflect the current events. Scholarly articles included work from Jutta Haider and Olaf Sundin and their research on information literacy challenges and Emilio Ferrara regarding nefarious applications of generative AI tools on digital platforms [8-9].

While the content was and continues to be modified and updated regularly, course modalities established at the start of the course planning process have remained largely intact; classes continue to be structured as a mix of lecture, discussion, and active learning exercises. Lectures and their corresponding slides summarize weekly readings, grouping main themes and providing overviews for students to reference throughout the semester. Lectures include discussion breaks where questions are posed both individually and as small group discussion topics, encouraging students to engage with the assigned reading and participate in respectful dialogue with their peers. Examples of discussion questions include:

- How do you (the students) currently determine the truth or accuracy of online information?
- How have you been taught information literacy skills throughout your education?
- What are your thoughts on content moderation and what would you improve/change?

The class schedule and assignments have also remained the same for all administrations of the course. The class meets twice weekly for 80 minutes each day; one class meeting is dedicated to lecture and discussion and one is devoted to a low-stakes in-class writing activity to be completed for points called In-Class Assignments (ICAs). There are ten ICAs throughout the semester; and while these are low-stakes activities, they have proven to be effective in encouraging steady class attendance, as they can only be accessed by those physically in the classroom. ICA topics align with weekly readings and include research and writing activities related to topics such as AI-generated images and theories about the dissemination of online misinformation. ICAs are also used to prepare students for major assignments with scaffolded activities such as identifying research topics, conducting preliminary library research, and creating annotated bibliographies. A sample ICA and associated grading rubric can be found in Appendix 2.

In addition to these ICAs, there are three major assignments throughout the semester: the Library Research Assignment, the midterm, and the Group Digital Literacy Project. The Library Research Assignment tasks students with conducting research on an information literacy topic of their choosing. While not assigned to complete a research paper, students are asked to develop a short thesis paragraph that includes making a claim in addition to providing evidence that supports that claim. Students are required to include five reliable sources and provide an annotated bibliography. They then create an academic-style poster (using Google Slides or Microsoft PowerPoint, for example) and present their research findings to classmates,

instructors, librarians, and students from other EIS courses. The prompt for the Library Research Assignment can be found in the Appendix 3.

The midterm is a closed-book, hand-written exam via Bluebook where students answer two essay questions. Two weeks prior to the exam, students are provided three possible essay questions with the understanding that only two questions will be selected for the exam. During the course creation phase, the co-authors crafted several essay questions that drew from the course readings. During the semester, they identify the final three questions to share with students, dedicating one class period to studying and preparing for the midterm. This assignment allows the professors to check in with the students' ability to critically think about and integrate the readings and to thoughtfully answer the questions.

The final project of the semester is the Group Digital Literacy Project. In small teams, the students are tasked with creating an online campaign to promote information literacy and mitigate the spread of misinformation. On an online platform of their choosing (e.g. Instagram, TikTok, YouTube), students first design a digital literacy plan. This is the blueprint for the objectives and scope of their project; they must discuss their intended audience, why they chose that platform, a description of the campaign, and how they are incorporating ethical engineering design principles. Next students are asked to submit their digital deliverable, that is, the execution of that online information literacy campaign. They must adhere to the platform's terms of service as well as the university's student handbook in addition to citing several reliable sources. They can decide to post on a personal account, create a new account, or even keep the post private. During the final exam period, the group presents the results of their campaign. They must describe their purpose, campaign content, why they decided to publish the online campaign privately or publicly, and any statistics they garnered such as views or likes. The three components of the final project (e.g. the plan, deliverable, and presentation) are graded separately and the professors grade and provide feedback at each stage, giving the students constructive ways to improve their project along the way. The prompt from the Group Digital Literacy Project can be found in Appendix 4.

Course Administration

The course was first delivered in the Spring 2025 semester, and during that inaugural semester, the co-authors were compensated as if they were teaching the course alone, as the university recognizes that new course offerings - even those with more than one instructor - often require additional labor. After the first semester, however, their compensation was halved as the university divides the compensation for established co-taught courses by the number of instructors. Thus, as EIS 103 is a 4-unit course, each co-author is paid as if they taught a 2-unit course. (Each unit corresponds to a Carnegie unit. For a 4-unit course, this requires two 80-minute lectures and about 7.5 hours of reading and homework for a total of about 10 hours of work each week.) The realities of co-teaching, however, do not allow for a neat division of labor

among instructors. For example, during past and current administrations of the course, both co-authors have attended all class meetings. While they take turns leading lectures, having both instructors present in class has been critical in ensuring a cohesive delivery of material from one week to the next, consistently addressing students' questions, and attending to other administrative matters.

Grading load, however, is more easily divisible. The co-authors share grading duties by grading half of the submissions of each assignment. One week, the engineering librarian grades the assignments from the first half of the roster and the engineering writing professor grades the assignments from the second half. The next week, the co-authors switch. By doing this, the co-authors not only share the grading load but can easily compare notes on the same assignment for norming purposes. In order to streamline grading, they created rubrics for each assignment, using a modified form of Rodney Stutzman and Kimberly Race's Everyday Rubric Grading, which is often used in courses where there is contract or specifications-based grading [10]. While this course did not use the contract grading model, this form of rubric was chosen as it focuses on students' understanding of course concepts, meeting of assignment expectations, communication quality, and analytical depth - areas important in an introductory-level general education course. Formulating rubrics for each individual assignment took some time, but once created, they were extremely helpful in standardizing and facilitating the weekly grading loads. A sample rubric (and its associated assignment) is attached as Appendix 2.

Since they saw each other twice each week, the co-authors kept in close communication. This helped them quickly address issues in classroom management and present a united voice when addressing student concerns. When individual questions were sent via email, the instructor who had the time to respond first took the lead in communicating with that student, while the other instructor was kept informed. Most emails were requests for makeup opportunities and explanations for missing work or class.

Student evaluations from the first two administrations of the course were largely positive, with students appreciating the timeliness and relevancy of the course to their lives and the connection to their fields of engineering study. The co-authors also observed that there were many lively discussions among students during lectures and weekly ICAs, which may indicate engagement with the course material. A few students during the first semester of the class expressed their dislike of the midterm examination, as it was conducted on paper and was closed book. However, there were no further complaints during the second semester of the course. As instructors in the engineering school are increasingly turning to paper exams to thwart AI usage, students may be becoming more accustomed to this format.

Some unanticipated issues during the first semester were more prosaic, but still needed to be addressed. Chronic lateness to class proved to be an issue for several students. When the class

was doing group assignments, tardiness was particularly problematic. Another classroom management issue concerned eating in class, as the classroom is within the Science and Engineering Library, which prohibits food. Thus, in the second semester of the course, the co-authors created a new late policy requiring students to be in class within the first 15 minutes of class in order to participate in ICA, as well as a policy prohibiting food in the classroom. These revisions, along with early enforcement of these rules, minimized these issues.

With the third administration of this course in progress, the co-authors re-affirm that pre-semester preparation of all course materials (e.g. reading, slides, and assignments) and consistent communication have been the greatest strengths, as they have proved critical in making the teaching of course rewarding and fun. Any adjustments to the course materials were limited to dates and changes to reflect new developments. As a result, the co-authors were able to devote time during the semester to refining lectures, keeping on top of grading, and interacting with students.

As course enrollment was full at 24 students for three semesters, an additional section of the course will be offered for Fall 2026. with another STEM librarian and faculty from the Engineering in Society Program added to the teaching staff. Each section will use the same curricular materials and will be staffed with one of the co-authors to ensure continuity of instruction.

Challenges Ahead

Though challenges in gaining approval for this course have been overcome, issues of the course's longevity remain. At the institution, many faculty and administrators understand the importance of information literacy, but uncertainty remains about how it should be taught, who should be responsible for teaching it, and whether students will take such courses. This institution's current financial issues add to the course's uncertain future due to the increased pressures to satisfy enrollment requirements or risk cancellation [11]. As this course is open only to students majoring and minoring in engineering, the pool of students who can take the course is limited. Fortunately, the course's general education designation for this small group of students has resulted in consistent enrollment for the course's first three semesters.

Also important to the course's longevity is visibility. Offering a course in information literacy at a school without a formal undergraduate information studies program requires consistent advocacy and promotion to ensure that students and university administrators know that it exists and understand its import and relevancy. Thus, prior to the first two administrations of the course, the co-authors conducted extensive and frequent outreach to student advisors in all engineering departments, as they help students select courses. To help with outreach, the co-authors created a course website with a course description, student testimonials, examples of assignments, and registration details [12]. They also pitched stories about the course to higher

education news outlets such as *Inside Higher Ed*, and they sought out other venues to distinguish their course [13]. For example, they applied for the 2025 MLA-EBSCO Collaboration for Information Literacy Prize and were very fortunate to be selected as co-winners [14]. Once such external attention was gained, they received more recognition from their institution's internal marketing team [15].

Conclusion

Information literacy courses like EIS 103 require dedicated partnerships among librarians and faculty. The co-authors would not have been able to overcome the many challenges in developing and administering their course without their partnership. And there is no doubt that each alone would not have been able to make EIS 103 a reality. The course's interdisciplinary nature spanning the university library and the engineering school helped to build the necessary institutional support to pass scrutiny of several university and school-level committees. The course's link to the engineering school helped to provide an administrative homebase and a specialized focus, and the inclusion of the libraries added essential disciplinary expertise. On a personal level, collaboration was not only critical in persevering through protracted bureaucratic processes that required multiple revisions to the course, but it also solidified trust and confidence among colleagues. Thus, the co-authors recommend that more librarians and faculty collaborate to co-create and co-teach courses. Together, they can use their classroom experience, pedagogical understanding, and subject area expertise to create courses on information literacy that can have a lifelong impact on students.

References

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Appendices

EIS 103 Course Materials

[Appendix 1: Syllabus](#)

[Appendix 2: Sample In-Class Assignment and Grading Rubric](#)

[Appendix 3: Library Research Assignment](#)

[Appendix 4: Group Digital Literacy Project](#)

Appendix 1: Syllabus

EIS 103g: Information Literacy: Navigating Digital Misinformation

Units: 4

Fall 2025

T/Th 12:00pm - 1:50 pm

Section 28402

Location: SSL 210

Course website: <https://sites.google.com/usc.edu/eis-103/home>

Co-Instructors:

Cari Kaurlooto, USC Libraries

Office: SSL 303

Office Hours: by appointment

Contact Info: cari.kaurlooto@usc.edu

Helen Choi, USC Viterbi School of Engineering

Office: DRB 254

Office Hours: MW via Zoom here: <https://calendar.app.google/MZ1vyd96AKJV9daA8>

Contact Info: helenhch@usc.edu

Catalogue Description

Analyzing misinformation and disinformation on digital platforms using library research methodologies and applying information literacy principles; examining how technology creates and disseminates information in society.

Satisfies General Education in Category C: Social Analysis for Viterbi students (majors and minors) only.

Instruction Mode: Lecture

Grading Option: Letter

Course Description

The rise of social media and other digital technologies in the past two decades has been accompanied by an unprecedented increase in the proliferation and dissemination of misinformation and disinformation.

The implications of the spread of false information extend far beyond the digital space to include significant social, political, and economic upheavals throughout the world. For today's students, these technologically complex digital landscapes are their primary sources of information, making digital and informational literacy a critical and necessary life skill. This course on information literacy on digital platforms will familiarize students with the technological designs and operations of digital tools that shape the content they see in their daily lives. It also aims to bolster their critical thinking, information literacy, and library research skills so that students can identify and analyze false information and recognize when reliable information is needed and where reliable information can be found. These skills are directly transferable to students' academic, professional, and personal online lives.

Faculty in technical communication from the Engineering in Society (EIS) Program at USC Viterbi and faculty from the USC Libraries will guide engineering students in an examination of how social media and other digital technologies shape our understanding of, access to, and use of information. As students need reliable tools to parse truths from false information, they will learn about, examine, and apply academic research methods and information literacy principles from the USC Libraries. Students will then investigate digital technologies like Tiktok and ChatGPT and analyze the impact of these user experience designs and systems on the creation and dissemination of misinformation and disinformation in society. They will also explore how principles of engineering ethics relate to design choices and social implications of these technologies. And finally, students will explore how a widely-used yet often-denigrated digital resource in academia, Wikipedia, integrates academic sources on its pages. They will examine the technologies and community values embedded in Wikipedia and how the human contributors to this collective enterprise attempt to discern and verify information and combat misinformation. As a summative assessment, students will use their library research skills, information literacy skills, and understanding of social media systems and other digital tools to devise a communications project aimed at enhancing the informational literacy of the general public.

Prerequisite(s): none

Co-Requisite(s): none

Concurrent Enrollment: none

Recommended Preparation: none

Learning Objectives

By the end of the course, students should be able to

- understand that scholarship is a conversation
- recognize that research is an iterative process
- formulate research questions appropriate for assignments
- develop effective search strategies
- critically examine information from various sources
- distinguish among types of sources
- use sources to support an argument or claim with evidence
- apply research methods to examine information on digital platforms
- identify how digital platforms disseminate information
- analyze the ethical implications of engineering design decisions on digital platforms
- explain the social implications of the dissemination of misinformation on digital platforms

Assessment of the degree to which learning objectives have been achieved will be conducted using students' coursework.

Course Notes

This is an in-person course and uses standard letter grading.

Required Technology, Materials and Subscriptions

All students must bring a Windows/Mac laptop to every class.

All required readings, videos, and training modules are posted on Brightspace (BS) under Content → Weekly Content. All readings should be completed prior to the start of each week.

Students must obtain a subscription to the *New York Times* and the *Wall Street Journal*. Free subscriptions can be accessed here through the USC Libraries.

Assignments

The assignments for this course are varied so that students can employ multi-modal communication skills, demonstrating critical thinking, writing, speaking, and collaboration.

They include in-class assignments, a library research project, a mid-term exam, and a group project on digital literacy.

1. In-class assignments will consist of in-class activities related to the class reading and lecture topic. There are ten (10) in-class assignments and each is worth 10 points for a total of 100 points. There are no make-ups available for such assignments. At the end of the semester, the lowest two in-class assignment scores will be dropped. **You must be in-class on time on the day an in-class assignment is due to be eligible for credit for that in-class assignment. If you are more than 10 minutes late to class, you will not be eligible to complete the in-class assignment.**
2. The library research project will consist of using the USC Libraries resources to craft an annotated bibliography and a poster. The library research project is worth three hundred (300) points: 150 points for the annotated bibliography and 150 points for the poster. Specific parameters will be provided in class.
3. The midterm exam will consist of questions related to lectures, readings, and class activities. The questions will require short essay responses. The midterm exam will be worth three hundred (300) points.
4. The group project will be completed in groups of 3 to 4 and consist of the following two components:
 - *Digital literacy plan and digital deliverable*: This plan will be a blueprint for a public service announcement or campaign regarding digital literacy that will then be implemented online. The plan will consist of a report outlining the target audience, the objectives and scope of the campaign, strategies and the platform that will be used to reach objectives, a description of the deliverable (for example: a Tiktok, an IG post, or a YouTube video) and its execution plan, and how performance or efficacy of the plan will be measured. The report must utilize and cite at least ten (10) reputable sources in the USC libraries. The digital deliverable will be an execution of a digital literacy plan on the live platform. The digital literacy plan and the execution of the deliverable are each worth 100 points for a total of 200 points, and all group members will receive the same grade. Specific parameters will be provided in class.

- *Presentation:* The group presentation will follow the execution of the digital literacy plan and deployment of the digital deliverable; it will include the results of the plan, as well as an analysis of its efficacy in reaching goals, overall impact on information literacy, and engineering design ethics. It will be about 10 minutes long and accompanied by no more than 5 presentation slides (including transitions). Each slide should have fewer than 25 words. All members of the group should speak for at least 2 minutes. The group presentation is worth 100 points and all group members will receive the same grade for this assignment. Specific parameters will be provided in class.

Attendance and In-Class Assignments

Attendance does not count towards your grade. However, if you do not attend a class during which there is an in-class assignment, you will receive a zero for that assignment. There will be ten in-class assignments, and they are designed to be useful building blocks for the library research project, mid-term exam, and group project. They cannot be made-up. The lowest two in-class assignment scores will be dropped from your course grade at the end of the semester.

Grading Breakdown

Assessment Tool (assignments)	% of Grade
In-class assignments	10
Library research project: annotated bib and poster	30
Mid-term exam	30
Group project: digital literacy plan and digital deliverable	20
Group project: presentation	10
TOTAL	100

Grading Scale

All assignments are assigned point values according to the following ranges:

- 90-100% (A)
- 80- 89.99% (B)
- 70- 79.99% (C)
- 60- 69.99% (D)
- 0- 59.99% (F)

Pluses and minuses equal the top and bottom 2.9 points of each grade category (i.e., 87.0 to 89.999 = B+ and 80.0 to 82.999% = B-). This course is not curved.

Assignment Submission and Late Work Policies

All assignments must be submitted and/or delivered in-person or as otherwise designated by the instructors. Assignments turned in within the next 24-hour period after the deadline will be eligible to receive 90% of the number of points available for that assignment; within the next 24-hour period, 80%; and so on. For example, if a 100-point assignment is due at 11:00 PM, and it

is submitted at 11:00:01 PM, it will be considered late and a 10-point deduction (10%) will be applied. If it is submitted between 24-48 hours late, a 20-point deduction (20%) will be applied. Please plan accordingly and do not wait until the last minute.

You must be in-class on the day an in-class assignment is due to be eligible for credit for that in-class assignment. In-class assignments cannot be made-up.

Academic Integrity

Unless otherwise noted, this course will follow the expectations for academic integrity as stated in the USC Student Handbook. The general USC guidelines on Academic Integrity and Course Content Distribution are provided in the subsequent “Statement on Academic Conduct and Support Systems” section.

If found responsible for an academic violation, students may be assigned university outcomes, such as suspension or expulsion from the university, and grade penalties, such as an “F” grade on the assignment, exam, and/or in the course.

Please ask the instructors if you are unsure about what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

You may not record this class without the express permission of the instructor and all other students in the class. Distribution of any notes, recordings, exams, or other materials from a university class or lectures — other than for individual or class group study — is prohibited without the express permission of the instructor.

Use of Generative AI in this Course

Generative AI is not permitted: There are currently many social, legal and ethical concerns regarding the training, use, and deployment of generative AI tools. Since creating, analytical, and critical thinking skills are part of the learning outcomes of this course, all assignments should be prepared by the student working individually or in groups as described on each assignment. Students may not have another person or entity or tool or service complete any portion of the assignment. Developing strong competencies in these areas will prepare you for a competitive workplace. Therefore, using AI-generated tools is prohibited in this course, will be identified as plagiarism, and will be reported to the Office of Academic Integrity. Learn more about AI (large language models) here: <https://lile.duke.edu/ai-ethics-learning-toolkit/>.

We do not outsource thinking and writing to AI tools when communicating with you, designing coursework, grading your work, providing feedback, or writing letters of recommendation. Respect for intellectual ownership, clarity of human agency, and mitigation of deskilling through intentional practice are important to us.

Course Evaluations

Course evaluation occurs at the end of the semester university-wide. It is an important review of students’ experience in the class, and students will be provided with class time to complete evaluations at the end of the semester.

Course Schedule

	Topics/Daily Activities	Readings Prior to Each Week (BS → Content → Weekly Content)	Deliverables

Week 1 8/26 8/28	What is Information Literacy? (Part 1)	Weekly Content → Week 1	
Week 2 9/2 9/4	What is Information Literacy? (Part 2)	Weekly Content → Week 2	In-class assignment 1 due 9/4
Week 3 9/9 9/11	What is Digital Literacy?	Weekly Content → Week 3	In-class assignment 2 due 9/11
Week 4 9/16 9/18	Applied information and digital literacy: academic research tools and applications; intro to library research project	Weekly Content → Week 4	In-class assignment 3 due 9/16
Week 5 9/23 9/25	Limits of academic research; working on library research project	Weekly Content → Week 5	In-class assignment 4 due 9/23
Week 6 9/30 10/2	Poster presentations in class	Weekly Content → Week 6	Library research project - due prior to class start time on 9/30
Week 7 10/7	Social media platforms; the relationship engineering design and social impact	Weekly Content → Week 7	
Week 8 10/14 10/16	Chatbots, image generators and the dissemination of mis/dis information	Weekly Content → Week 8	In-class assignment 5 due 10/14
Week 9 10/21 10/23	Applied engineering design ethics; principles of engineering design ethics	Weekly Content → Week 9	In-class assignment 6 due 10/23
Week 10 10/28 10/30	Midterm open class Midterm exam		Midterm exam on 10/30
Week 11 11/4 11/6	Perspectives on designing humane technology	Weekly Content → Week 11	In-class assignment 7 due 11/6; Work ahead and complete In-class assignment 8 part 1.
Week 12 11/13	Wikipedia, research, and mis/disinformation In-class assignment 8 part 1 is due 11/11 on the Wiki Education dashboard (Timeline → Week 11 trainings and Week 12 trainings)	Weekly Content → Week 12	In-class assignment 8 part 1 is due 11/11 on the Wiki Education dashboard; part 2 is due 11/13 in class.

Week 13 11/18 11/20	Group digital literacy plan begins; group and topic selection; platform selection for digital literacy plan; Group project meetings in-class	Weekly Content → Week 13	In-class assignment 9 due 11/18
Week 14 11/25	Group project meetings in-class	Weekly Content → Week 14	Digital literacy plan due by end of class on 11/25
Week 15 12/2 12/4	Group meetings and group work in-class: peer reviews of deliverable; deployment of deliverable	Weekly Content → Week 15	Digital literacy deliverable by end of class on 12/4
FINAL	Group presentation on final exam day: 12/16/25, 11am-1pm in classroom		Refer to the final exam schedule in the USC <i>Schedule of Classes</i> at classes.usc.edu .

Appendix 2: Sample In-Class Assignment and Grading Rubric

In-Class Assignment #6

For today's in-class work, you'll be working individually. Everyone must submit their own assignment. If you want to discuss questions with classmates or the instructors, please feel free to do so. Your responses, however, should be your own and written in your own words. This assignment is worth up to ten points and will be graded using the [in-class work rubric](#).

Do not use AI-tools for reading or writing or any other purpose. Use complete sentences.

First, make a document starting with your name and "In-class assignment 6." Once you have completed the tasks, submit your work to Brightspace → Activities → Assignments → In-class assignment 6 prior to the end of class today. Late penalties apply.

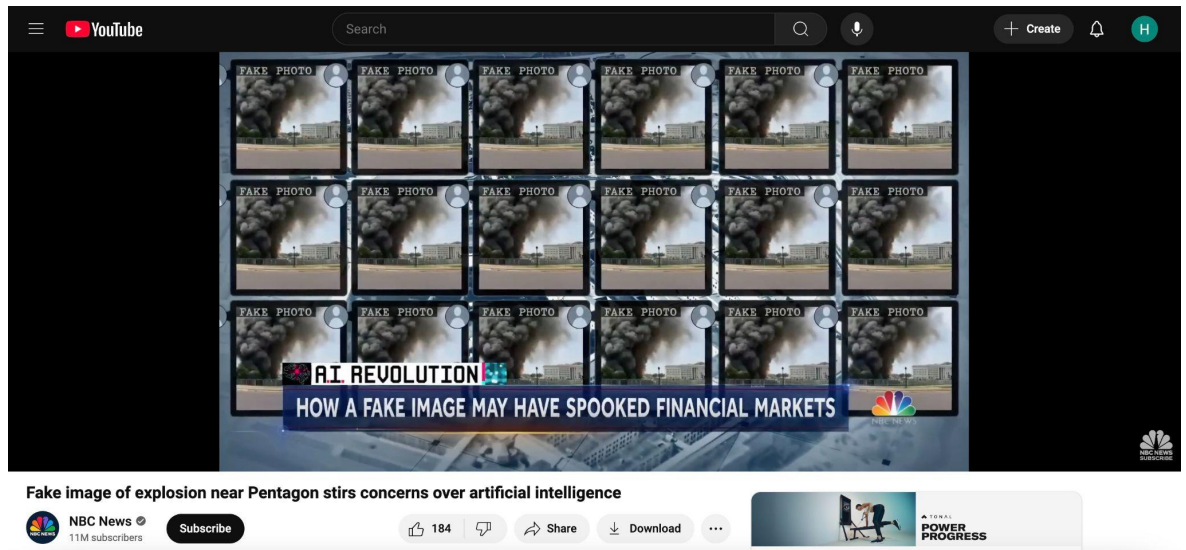
Name:

In-class assignment 6

1. Examine these three AI-generated images and general descriptions:
 - a. Harmless fun: Pope Francis dressed in Balenciaga puffer jacket



- b. Dangerous disinformation: Explosion near the Pentagon



c. Somewhere in the middle: President getting arrested



Do you agree with these categories? Why or why not? For each type of image, apply Prof. Kristina Lerman's approach to understanding misinformation (from Week 3) and discuss who benefits and who is harmed from the dissemination of these images. (5 points)

2. Read Duke University's AI Toolkit in the Week 8 folder on BS. There are ten questions; which of them are the most interesting to you and why? Click on the three questions you find most interesting and discuss at least three new things about AI that you learned from this toolkit and whether such information may change the way you interact with AI tools. **(5 points)**

In-Class Assignment #6 Rubric

QUESTIONS	POINT VALUE	POINT EARNED
TASK 1 - Classification of images (5 points)		
1. Agree with classification and why a. image 1 (pope) b. image 2 (pentagon) c. image 3 (trump/putin)	2.0	
2. Who benefits? a. image 1 b. image 2 c. image 3	1.5	
3. Who is harmed? a. image 1 b. image 2 c. image 3	1.5	
TASK 2 - Duke AI Toolkit (5 points)		
1. Which of the ten questions are the most interesting to you and why?	2	
2. Discuss at least three new things about AI that you learned from this toolkit and how it might change the way you interact with AI tools.	3	
DEDUCTIONS Based on the course rubric, up to 10% (1 point) can be deleted for poor writing quality and up to 10% (1 point) can be deleted for insufficient analytical depth. Responses not in complete sentences receive 0 points.		
TOTAL (out of 10)		

Appendix 3: Library Research Assignment

In the first unit for EIS 103, we are learning about information and digital literacy and how to use academic research tools and resources. In this assignment, we will apply our learning in a multi-step analytical framework in which we will

1. conduct research using academic databases on a topic of your choice related to information and digital literacy
2. craft a one-paragraph thesis based on your research
3. document this research in an annotated bibliography
4. design and present an academic research poster based on this research

This assignment is designed to provide you with a framework for conducting research and applying information literacy concepts throughout your academic careers, so that you can begin your academic writing with an evidence-based overview of your topic and use your research to craft nuanced and evidence-backed positions.

Your work for this assignment may be used for your digital literacy plan later this semester; in addition, this approach may also be applied to your other evidence-based writing at USC.

Learning objectives

This assignment is designed to meet the following course learning objectives

- understand that scholarship is a conversation
- recognize that research is an iterative process
- formulate research questions appropriate for assignments
- develop effective search strategies
- critically examine information from various sources
- distinguish among types of sources
- use sources to support an argument or claim with evidence

Assignment components and parameters

This assignment is worth 300 points and consists of the following components:

1. Thesis paragraph (50 points)
2. Annotated bibliography (100 points)
3. Research-style poster (100 points)
4. Poster presentation and peer review (50 points)

All components (with the exception of the presentation) should be in one document and submitted on Brightspace → Activities → Assignments → Library Research Assignment prior to 11:59 AM on February 17, 2026. This assignment will be graded using the course rubric. You will then present your poster in class on February 17 or February 19.

Thesis paragraph (50 points)

First design a question that you would like to explore within the field of **information literacy**. Use your research to develop a one-paragraph argumentative or analytical thesis between 150-250 words. For this assignment, your thesis is not merely a sentence at the end of an introductory paragraph; it is a claim that states a clear position firmly grounded in research. You are developing an argumentative or analytical thesis that presents a claim based on your research. (Avoid doing things the other way; do not settle on an opinion and then cherry pick evidence to fit that stance.)

Your thesis should not be in the form of a question. It should not be confrontational click bait - as you want your reader to read your work rather than be repelled by it. It should also not be vague or worst of all - obvious. Instead - **let your research guide you** in stating a very specific and nuanced claim that may interest your reader. This might mean that your claim has some tension or complication or other interesting information.¹ Your thesis should have **two parts**: a specific and arguable claim **and** research evidence that supports, explains, challenges, and elucidates it. Be sure to include all five of annotated bibliography sources, using IEEE in-text citation style.

Tips: The more specific your thesis, the better. And the more practical your thesis, the more relevant and interesting. Avoid broad statements about informational or digital literacy. Exclude any and all generalizations not backed by research. Think about specific topics and everyday applications that people will find useful and relevant.

Annotated bibliography (100 points)

Annotated bibliographies are a helpful step in developing research topics in addition to honing one's research and writing skills. For this component, you will conduct research on your topic and find five reliable sources to inform your thesis paragraph.

For each source, compose a concise and clearly crafted annotation that addresses the following critical components:

- background and credibility of the author
- background and credibility of the publication (e.g. journal, newspaper, website)
- the main point of the work
- its relevance to your topic and thesis
- how the source compares with or relates to at least one other source in your bibliography

You will first list your resource in IEEE format for bibliographies and note the annotation immediately beneath it. The annotation for each source should be about 150-250 words and include components above. Your writing should be clear and concise. Get to the point quickly and avoid generalizations. It is better to be concise than to add filler words to meet the word count; filler words will not enhance the utility of this document and wastes the reader's time. You must use complete sentences.

¹ Adapted from "Developing a Thesis" from the Harvard College Writing Center.

Academic Research-Style Poster (100 points) and Presentation (with peer evaluation) (50 points)

In academic settings, poster sessions allow multiple simultaneous presentations, and they allow interaction between the presenters and attendees. In a poster presentation session, presenters use a condensed, poster version of their research to explain it to attendees. Posters are usually printed on large paper, but to avoid printing and paper costs, we'll use a presentation slide.

Create a condensed version of your thesis and research on a static **slide** (pdf or ppt) to present to classmates and possibly other librarians and faculty.² Your slide should clearly present your thesis, evidence, and a relevant informational graphic; all information, graphics and images must be accompanied by citations in IEEE. You must also include a brief summary of your research strategies, such as your choice of databases, your keyword searches, etc. Your poster must have a title clearly noted at the top so that attendees can easily see it as they walk by. The title should be an abbreviated version of your thesis, rather than a question or a general topic description. Here's a [sample poster](#).

Strive for clarity and clean design. Remember that the purpose of this is not to show off your Canva skills; it is to inform an audience of colleagues and possibly some experts in the field about an important topic in information literacy! Here are some [tips](#) from the MIT Comms Lab.

In addition to submitting your work on BS, you'll display your slide on a laptop in class and explain it to students and others who will move from one poster to another during the class poster session. If your poster catches someone's eye, they might ask you about your topic; be prepared to give a 20-second presentation that provides a quick overview. And be on your toes: you never know what someone might ask you in a poster presentation. Your poster presentations (which includes your 20-second presentations and your responses and interactions with others for the duration of the class) will be worth 40 points.

On the day you do not present, you will attend the presentations and complete an evaluation worth 10 points.

Steps

1. Review the course materials (reading, lectures, in-class assignments, and your notes) to refresh your memory about research best practices
2. Select a topic related to information literacy and the digital world that is specific with a clear real world application
3. Conduct research using library resources (USC Libraries search, databases, Google Scholar, etc.)
4. Complete the annotated bibliography component
5. Using your research, craft a one-paragraph analytical thesis.
6. Create a research-style poster with all required components.

² Adapted from Prof. Elisa Warford's Case Study Project assignment for EIS 370.

7. Combine your annotated bibliography and thesis and poster into one document and submit on BS prior to the due date.
8. Present your slide during the class poster session. Prepare a 20-second talk that provides an overview of your work.
9. On the day you do not present, complete the evaluation that will be provided at the presentation.

Appendix 4: Group Digital Literacy Project

This group project is designed to build collaboration skills and build a plan to help others build their informational literacy on digital platforms.

Learning objectives

This assignment is designed to meet the following course learning objectives

- understand that scholarship is a conversation
- recognize that research is an iterative process
- formulate research questions appropriate for assignments
- develop effective search strategies
- critically examine information from various sources
- distinguish among types of sources
- use sources to support an argument or claim with evidence
- apply research methods to examine information on digital platforms
- identify how digital platforms disseminate information
- analyze the ethical implications of engineering design decisions on digital platforms
- explain the social implications of the dissemination of misinformation on digital platforms

Assignment components and parameters

This assignment is worth three hundred (300) points and consists of the following components:

1. Digital literacy plan (100 points)
2. Deployment of the literacy plan online (100 points)
3. Presentation (100 points)

You will work in groups of 2-4 of your own choosing. All members of the group will receive the same grade for all assignment components, subject to the exceptions noted below. This assignment will be graded using the course rubric.

Digital literacy plan (100 points)

This plan will be a blueprint for a public service announcement or campaign regarding a topic *within* digital literacy designed to mitigate the dissemination of misinformation that will then be implemented on an online social media platform.

The plan will consist of a report addressing the following:

- the objectives and scope of the campaign
 - discuss why such a campaign is needed
 - discuss a specific field, topic, community
- the platform that will be used to reach objectives and an explanation as to why the platform was selected and what platform features you'll use to enhance dissemination and mitigate misinformation related to your deliverable
- a description of the deliverable (for example: a Tiktok, an IG post, a Bluesky infographic, a reddit post, or a YouTube video)

- how the deliverable will be executed and how it aligns with ethical engineering design (e.g. content, style, and features)
- the campaign's target audience and why this audience is important
- why this campaign will be effective in terms of enhancing information literacy
- limitations of the campaign
- how performance or efficacy of the plan will be measured

IMPORTANT NOTES:

- Your campaign should be about misinformation and/or how to enhance people's information literacy; avoid "mythbusting" or disparaging others' posts. For example you should not be providing "true" fitness information or "true" vaccine information, as we are not experts, and we know from our course readings that this form of communication is largely ineffective at dismantling misinformation. Campaigns that are not about misinformation and information literacy will receive poor scores.
- Your campaign should be engaging and show that you recognize the expectations of your audience and norms of your platform. Do not, for example, submit a Youtube video where you are talking to the camera and/or narrating slides.

The plan must utilize and cite at least ten reputable sources from the USC Libraries, and you are encouraged to use course readings. You must use IEEE citation style. The plan must include a title page with the plan's title, group members' names, and date and page numbers. Use Times New Roman font and block paragraphs. The plan should be single-spaced with double spaces between paragraphs. Use headings to indicate the various sections of your plan. The plan must be at least two single-spaced pages long but no more than three single-spaced pages long (excluding the title page and references).

Your writing style should be professional and concise; avoid bloated generalizations and generic statements that do not provide useful information to your audience. Strive for concision and precision in your writing. Follow the template provided in Group Digital Literacy Plan Notes.

This plan is due on Brightspace → Activities → Assignments → Digital Literacy Plan prior to the end of class time on November 25, 2025.

Digital deliverable (100 points)

The digital deliverable will be an execution of a digital literacy plan on the live platform. If your plan proposes a Tiktok post about how Wikipedia works to provide reliable information, then your deliverable is the Tiktok post.

The content of your deliverable should reflect your plan and be in strict alignment with the terms and conditions of the selected digital platform and the USC Student Handbook. Remember that you are representing the school, this course, and yourself and that the internet is forever. If the deliverable is flagged for violating community guidelines on the relevant platform, your group will receive a zero for this assignment.

In addition, unlike most social media content - your deliverable must expressly refer to and cite at least 3 reputable references to support the claims in your deliverable. You must integrate the references in your deliverable and clearly identify them for your audience so they can access them to learn more on the topic. (These 3 references can be from the 10 sources you used in your report.)

Your deliverable should make effective use of platform features relating to dissemination and mitigating misinformation. Your goal is to share your deliverable widely and ethically while not sharing misinformation. Thus, your deliverable must not only be appropriate for your platform, but also ethically designed.

This digital deliverable is due on the relevant platform prior to the end of class time on December 4, 2025, and one member of your group must email an accessible link to the deliverable to both instructors prior to the end of class time on December 4, 2025. If we can't access it, we can't grade it.

However, if your group does not want to publish the deliverable, please inform the instructors, and in lieu of publication on a platform, your group should complete a mock-up of the deliverable and email to both instructors prior to the end of class time on December 4, 2025. Depending on the platform, you can also apply privacy settings. For example, you can publish a YouTube video that is private and viewable only to those with a link.

Group presentation (100 points)

The group presentation will take place after the execution of the digital literacy plan and deployment of the digital deliverable; it will include a description and results of the plan, as well as an analysis of its efficacy in reaching goals and specific ways it could be improved. The presentation must also include a discussion of how ethical engineering principles influenced your plan. If your group decides not to publish its deliverable on a platform, the presentation should include a description and predicted results of the plan, why the group decided not to publish a deliverable, and a discussion of how ethical engineering design influenced your group literacy project.

The presentation will be about 10 minutes long and accompanied by no more than 5 presentation slides (including transitions). Each slide should have fewer than 25 words (including those on images but excluding references). All claims, images, information, and any other content must be cited on the slide on which they appear using IEEE style.

All members of the group should speak for at least 3 minutes. No notes, devices, or other aids are permitted. Avoid reading slides during the presentation. After your presentation, each group member will be asked questions related to content in your report, deliverable, and presentation, including any readings and sources referenced therein. Thus, everyone should be familiar with all of the materials in the project.

The group presentation is worth one hundred (100) points and all group members will receive the same grade for this assignment; however, group members who are absent or

late more than 10 minutes from the start of the final exam time will receive a zero for the presentation. No one will be allowed into the final exam after 10 minutes from the start of the exam.

The group presentation will be delivered on the scheduled final exam day and time for this course, which is Tuesday, December 16th from 11am to 1pm in our classroom.